
Subject: Re: matrix operation

Posted by [pgrigis](#) on Thu, 23 Dec 2010 15:50:53 GMT

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For large values of N, the methods you mentioned are likely to be slower then a simple addition/multiplication combo.

$$\begin{aligned}x' &= a1*x + b1*y + c1*z + d1 \\ y' &= a2*x + b2*y + c2*z + d2 \\ z' &= a3*x + b3*y + c3*z + d3\end{aligned}$$

Ciao,
Paolo

On Dec 23, 9:39 am, Gray <grayliketheco...@gmail.com> wrote:

> Hi all,

>

> I'm just getting really confused about how to do this properly. Can
> you all help?

>

> I have a list of x y coordinates, and I want to perform an affine

> transformation on them, so I have a 3xN array of (xi,yi,1) and a 3x3

> matrix for my transformation, and I want to end up with a 3xN array of

> (x'i,y'i,1). How can I transform all my coordinates at once? I know

> my tools are #, ##, transpose/reform, and matrix_multiply, but I seem

> to be chronically unable to sort this out. Thanks!

>

> --Gray

Subject: Re: matrix operation

Posted by [Gray](#) on Thu, 23 Dec 2010 16:08:47 GMT

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On Dec 23, 10:50 am, Paolo <pgri...@gmail.com> wrote:

> For large values of N, the methods you mentioned are likely
> to be slower then a simple addition/multiplication combo.

>

> $x' = a1*x + b1*y + c1*z + d1$

> $y' = a2*x + b2*y + c2*z + d2$

> $z' = a3*x + b3*y + c3*z + d3$

>

> Ciao,

> Paolo

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Well... I guess that makes sense. :)

Subject: Re: matrix operation

Posted by [rogass](#) on Tue, 28 Dec 2010 20:09:03 GMT

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On 23 Dez., 17:08, Gray <grayliketheco...@gmail.com> wrote:

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>>> --Gray
>
> Well... I guess that makes sense. :)

Hi,
are the inbuilt routines like t3d, poly_2d and /or poly_warp not
useful? Did they crash for large matrices?

Cheers

CR
